

State of  
Washington  
House of  
Representatives



**To:** Members of the Fisheries, Ecology, & Parks Committee  
**From:** Jason Callahan, Committee Counsel  
**Date:** December 1, 2004  
**RE:** Cruise Ship MOU Update

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A component of the Fisheries, Ecology, & Park Committee's December Assembly hearing will be dedicated to an overview of the memorandum of understanding (MOU) governing the regulation of the cruise ship industry. The 2004 cruise season was the first year that the MOU was in effect, and it applied to cruise ship traffic calling on Washington ports from April 21st until October 3rd. In that time seventeen vessels came to Seattle under the control of nine different operators.<sup>1</sup> This included approximately 150 individual vessel visits to the Port of Seattle's Terminal 30 and Pier 66.<sup>2</sup>

#### Scope of the MOU

The MOU was signed on April 20, 2004, and took effect prior to the start of the cruise season. The MOU was signed by the Department of Ecology, the Port of Seattle, and the Northwest Cruise Ship Association. The latter signatory is a private organization that counts as members various cruise ship operators. Only cruise ships that are operated by members of the Northwest Cruise Ship Association are bound by the terms of the MOU.<sup>3</sup> Of the seventeen vessels that called on the Port of Seattle in 2004, four were not members of the Northwest Cruise Ship Association and thus were not contractually bound by the terms of the MOU.<sup>4</sup>

The MOU applies anytime a vessel that is operated by a member of the Northwest Cruise Ship Association is physically located in certain agreed-to waterways. These waterways include the entirety of Puget Sound and the Strait of Juan de Fuca south of the Canadian border, as well as three miles into the Pacific ocean.<sup>5</sup>

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<sup>1</sup> One vessel, Holland America's *Zaandam*, called on Port Angeles and not Seattle. See Department of Ecology's chart "2004 Commercial Passenger Vessel Discharge Status and Wastewater Treatment", updated 8/19/04.

<sup>2</sup> See Port of Seattle's website: <http://www.portseattle.org/seaport/cruise/cruiselinesandschedules.shtml>.

<sup>3</sup> The MOU applied to the following vessel operators due to their membership in the Northwest Cruise Ship Association: Celebrity Cruises, Holland America Line, Norwegian Cruise Lines, Princess Cruises, Radisson Seven Seas. See MOU Appendix i and MOU section 6.

<sup>4</sup> The vessels calling on Seattle that were not bound by the MOU were: Maise Marine's *Universe Explorer*, Silver Sea's *Silver Shadow*, Cruise West's *Spirit of Oceanus* and West Steamship's *Empress of the North*. These vessels represented less than 9% of all cruise ship visits in 2004. See Department of Ecology's chart "2004 Commercial Passenger Vessel Discharge Status and Wastewater Treatment", updated 8/19/04.

<sup>5</sup> The three mile coverage into the Pacific Ocean is measured from the line of ordinary high water on the portion of the coast in direct contact with the sea.

## MOU contents overview

The MOU establishes industry oversight in three areas: Wastewater management, solid waste management, and hazardous waste management. The bulk of the document, however, deals with wastewater management. Cruise ship wastewater generally takes the form of either blackwater or graywater. Blackwater is the term given to sewage. The term graywater is reserved for other non-sewage waste streams such as waste from showers, laundry facilities, and sinks.<sup>6</sup>

The cruise ships have agreed in the MOU to not discharge any *untreated* wastewater<sup>7</sup> or solid waste<sup>8</sup> within waters subject to the MOU. In addition, the operators are prohibited from discharging sludge, which is the term given to residual solids that result from wastewater treatment, anywhere inside Puget Sound, along the American side of the Strait of Juan de Fuca, within twelve miles of the Pacific coast, or within a specified area to be avoided along the Olympic Coast National Marine Sanctuary.<sup>9</sup> Cruise ships are allowed to discharge both blackwater and graywater in Washington waters as long as it is treated by an Advanced Wastewater Treatment System (AWTS)<sup>10</sup>, and certain conditions are met.

Some of the conditions that must be satisfied in order to discharge wastewater treated by an AWTS apply to all discharges in Washington waters, while other conditions depend on where the ship is located in relation to its port of call. Vessels not satisfying these requirements are expected to hold all graywater and blackwater in on-board tanks until the vessel leaves the waters subject to the MOU. According to the Department of Ecology, two vessels satisfied the requirement for continuous disposal during the 2004 cruise season<sup>11</sup>, one vessel was able to dispose of treated effluent away from port but still in state waters<sup>12</sup>, and the other vessels falling under the MOU's jurisdiction were expected to hold all wastewater on board until after the vessel was outside of the waters subject to the MOU.

## Discharge requirements for vessels while underway

When a cruise ship is more than one nautical mile<sup>13</sup> from its berth in the Port of Seattle<sup>14</sup>, the operator may discharge wastewater from an AWTS as long as the vessel is moving at a speed of at least six

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<sup>6</sup> Blackwater also includes non-sewage waste from medical sinks. *See* MOU definitions section.

<sup>7</sup> *See* MOU section 1.1.1.

<sup>8</sup> *See* MOU section 1.2.

<sup>9</sup> *See* MOU section 1.1.4 and Appendix viii..

<sup>10</sup> *See* MOU section 1.1.3. The AWTS that must be installed on a vessel in order to discharge wastewater in Washington waters pursuant to the MOU is required to satisfy federal standards for wastewater discharge from cruise ships in Alaska. Title XIV of Congress' 2000 H.R. 5666 requires stricter wastewater treatment for cruise ships operating in Alaska than is required in the waters of other U.S. states. In the MOU, the cruise ships have voluntarily applied these standards to Washington waters.

<sup>11</sup> These vessels were the *Norwegian Spirit* and the *Norwegian Star*, both operated by Norwegian Cruise Lines.

<sup>12</sup> This vessel was the *Ooesterdam*, operated by Holland America.

<sup>13</sup> One nautical mile is equal to approximately 1.151 statute miles.

<sup>14</sup> It is unclear in the MOU how discharges at port are handled when the ship's port of call is not in Seattle.

knots<sup>15</sup>, and the operator has submitted paperwork at least 60 days before the discharge to the Department of Ecology. The required paperwork includes documentation and schematic diagrams of the treatment system used on the vessel, and documentation that the system is certified by the Coast Guard for use in Alaskan waters.<sup>16</sup>

#### Discharge requirements for vessels when at port

In addition to the documentation required for a discharge away from port, a cruise ship operator must supply the Department of Ecology with additional documentation before the vessel may discharge wastewater either at port, or within one nautical mile of its port. This additional documentation includes proof that all effluent will receive a final polishing with ultraviolet light prior to discharge, copies of water quality test results from the vessel's AWTs from the previous six months, a specific plan for holding wastewater in the vessel's tanks should the AWTs need to be repaired, provisions for 24-hour continuous monitoring of the turbidity of the AWTs effluent, and evidence that the AWTs system used by the vessel is capable of being shut down should monitoring reveal that the system is not working correctly.<sup>17</sup>

#### Additional discharge requirements for all vessels

There are seven additional conditions that must be satisfied before a discharge of treated wastewater can be authorized regardless of the vessel's physical proximity to its port of call. These conditions are in addition to the location-specific conditions discussed above. These conditions include an agreement to notify the Department of Ecology if a material change is made to the ship's onboard wastewater treatment system, an agreement to allow state personnel onboard the vessel to conduct at least one inspection of the AWTs per cruising season, and an agreement to conduct certain tests on the ship's effluent.<sup>18</sup> These tests must be conducted monthly during the cruise season by a laboratory certified by the state of Washington, and the tests must sample the effluent for fecal coliform as required in Alaska<sup>19</sup>, as well as sample for four other parameters.<sup>20</sup> The vessel operator is required to give the state notice before sampling occurs so that staff from the Department of Ecology can witness the event.<sup>21</sup>

In addition to the monthly testing requirement, all cruise ships are required to conduct a Whole Effluent Toxicity test, or WET test, once every two years.<sup>22</sup> The WET test is designed to identify the aggregate toxic effect of the effluent. The tests are standardized for the marine environment and seek

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<sup>15</sup> Six knots equals approximately 9.2 miles per hour.

<sup>16</sup> See MOU section 1.1.3.

<sup>17</sup> See MOU section 1.1.3. If the AWTs is not designed to shut down automatically, then operational controls must be in place to alert the vessel's engineering staff of the need to institute a system shutdown.

<sup>18</sup> See MOU section 1.1.3 (a-g).

<sup>19</sup> See Title XIV of Congress' 2000 H.R. 5666.

<sup>20</sup> In addition to fecal coliform, the monthly samples must measure pH, Biochemical Oxygen Demand, Total Suspended Solids, and Residual Chlorine. See MOU section 1.1.3 (a).

<sup>21</sup> See MOU section 1.1.3 (e).

<sup>22</sup> See MOU section 1.1.3 (c).

to directly measure the acute or short-term chronic adverse effects of effluents on vertebrates, invertebrates, and plants.<sup>23</sup> The WET tests do not need to be conducted by Washington-approved laboratories, but if the test is conducted to satisfy Alaskan law, then those records must be shared with the Department of Ecology.<sup>24</sup>

### Enforcement

The cruise lines that are party to the MOU have agreed to self-report any violations of the MOU to the Department of Ecology.<sup>25</sup> The MOU does not include enforcement provisions that are in addition to state law. The MOU also does not preclude the state from seeking the enforcement of state water quality standards if a violation of the MOU were to also violate state law.<sup>26</sup> Likewise, the existence of the MOU has no effect on the enforcement of federal water quality laws since the Coast Guard is not a signatory to the agreement.

### Future of the MOU

The MOU does not have an established expiration or sunset date. The current MOU was in place for the 2004 cruise season, and will remain in place for future cruise seasons unless either the State of Washington or the Northwest Cruise Ship Association decide to cancel its participation,<sup>27</sup> and amendments to the MOU must be agreed to by all parties. The MOU signatories have agreed to meet at least once annually to discuss potential changes and to review the effectiveness of the MOU.<sup>28</sup> The first meeting under this provision is scheduled to occur prior to the committee's December work session on the topic

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<sup>23</sup> See the Environmental Protection Agency's website at <http://www.epa.gov/OST/WET>.

<sup>24</sup> Under the terms of the MOU, cruise operators are required to provide duplicate test results to the Department of Ecology for any tests conducted in compliance with Alaska's cruise ship laws. If tests are conducted in Washington waters, the state can require the vessel operator to share the sampled material so that the Department of Ecology can conduct independent tests. See MOU section 1.1.3 (b & d).

<sup>25</sup> See MOU section 10.

<sup>26</sup> The May 3, 2003, incident involving the discharge of sewage sludge from the vessel *Norwegian Sun* predated the implementation of the MOU; however, had a similar incident occurred in state waters during the 2004 cruise season, it would have been a violation of the MOU and a violation of state law. In such a scenario, the existence of the MOU would have had no limiting effect on the enforcement options available to the Department of Ecology. However, if a vessel discharged effluent treated by a federally-approved marine sanitation device without satisfying the MOU's conditions, the act would be only a violation of the MOU and not a violation of state law.

<sup>27</sup> The MOU can be cancelled by any signatory other than the Port of Seattle by giving ninety days notice to the other party. See MOU section 10.

<sup>28</sup> See MOU section 10.